Chapter III
Other States' Child Support Formulas

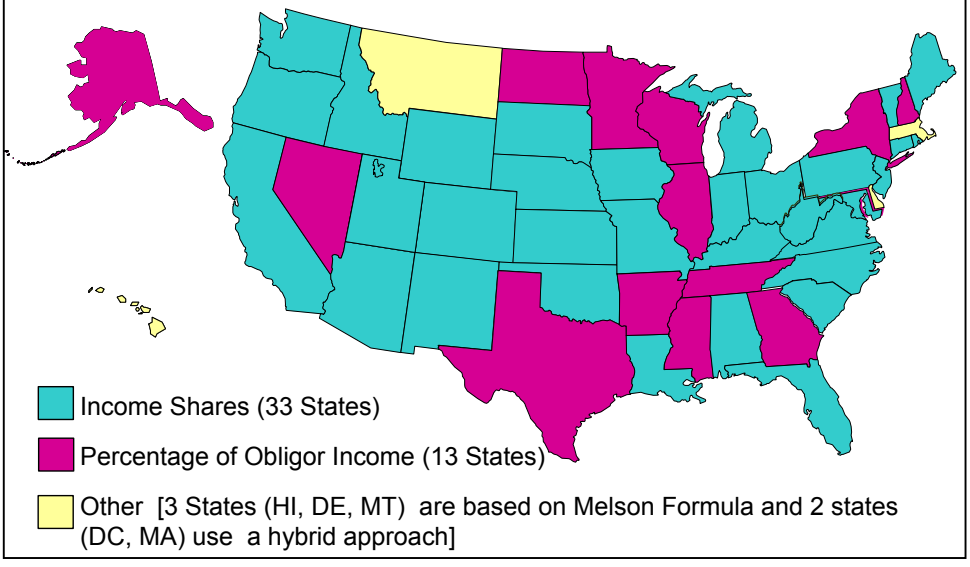
In the previous chapter, we saw that the Michigan Child Support Formula is generally within the range of the current economic evidence of child-rearing costs. How do other states use child-rearing costs and how does Michigan compare to other states? This Chapter describes child support guidelines models used by other states and what economic evidence other states use as the basis of their guidelines formulas and schedules. This Chapter concludes with two sets of comparisons.

- ✓ The Michigan Formula is compared to those of bordering states and two other large states in the region. (Michigan is ranked 8th in population among all states).
- ✓ The Michigan Formula is compared to the amounts under unique child support guidelines models used by Delaware and Massachusetts and a handful of other states.

GUIDELINES MODELS

As shown in Exhibit III-1, states base their child support guidelines on four basic models: the Income Shares model; the percentage-of-obligor income model; the Melson Formula; and, the Hybrid approach. All of the states bordering Michigan use either the Income Shares model or the percentage-of-obligor income model.

Exhibit III-1
Application of Child Support Guidelines Models



Percentage-of-Obligor Income

This is the oldest child support guidelines model. The child support order amount is determined based on a percentage of noncustodial parent income only. Income can be gross or net. The percentage may be flat or vary according to income. There are 13 states that use this model. Most of these states assume that the custodial parent spends an equal amount on the child. For about half of the percentage-obligor income states, the precise sources of economic estimates of child-rearing costs underlying their schedules are unknown. The remaining half just adopted the Wisconsin Standard.[25] There is on notable exception, Arkansas, which bases its guidelines schedule on the early Betson-Rothbarth estimates.

Income Shares

Used in 33 states, including Michigan, this is the most commonly used guidelines model. It was recommended for use by the National Advisory Panel on Child Support Guidelines convened by the Federal Office of Child Support in 1984 at the request of the House Ways and Means Committee. The basic precept of the Income Shares model is that the child should receive the same amount of expenditures the child would have experienced if the parents lived as an intact family. The amount of those child-rearing expenditures is apportioned to the parents according to income. The custodial parent is presumed to spend his or her share directly on the child. Exhibit III-2 displays an example of an Income Shares calculation. Most Income Shares States base their schedules on either the Espenshade-Engel estimates or the old Betson-Rothbarth estimates. (These estimates are discussed in the previous chapter)

Exhibit III-2
Example of Income Shares Calculation
(Number of Children = 1)

	Noncustodial Parent	Custodial Parent	Combined
1. Net Income	$494	$352	$846
2. Each Parent's Share of Combined Net Income *(Line 2 for each parent / Line 2 Combined)*	58%	42%	100%
3. Basic Child Support Obligation (from Schedule, represents amount spent on children in an intact family with comparable income and number of children)			$184
4. Each Parent's Share of the Basic Obligation *(each parent's Line 2 x Line 3)*	$107	$77	
5. Noncustodial Parent's Child Support Obligation *(Line 4 for the noncustodial parent, the custodial parent spends his/her share directly on the children)*	$107		

[25] When Wisconsin is included, there are another six states that base their schedule on the Wisconsin Schedule. Wisconsin was one of the earlier states to promulgate statewide guidelines. As discussed in the previous chapter, Wisconsin considered the economic estimates of child-rearing costs available in 1981 when it developed its Schedule, but several additional policy assumptions were made before it arrived at its final schedule.

Delaware Melson

This model was developed by Judge Melson for use in Delaware. It is currently used by three states: Delaware, Hawaii and Montana. Basically, the primary support needs of the children are first determined by apportioning them to the parents according to each parent's adjusted income. If the noncustodial parent has any after-tax income left after providing his/her share of the child's primary support needs and for his/her own basic needs, an additional percentage of remaining income is assigned to child support. In this case, the noncustodial parent can afford a standard of living above subsistence and the child shares in that standard of living. An example of a Melson formula calculation is provided in Exhibit III-3.

The Melson formula was also recommended for use by the National Advisory Panel on Child Support Guidelines.

Exhibit III-3
Example of Melson Calculation
(Number of Children = 1)

PART I. INCOME	Custodial Parent	Noncustodial Parent	Combined
1. WEEKLY NET INCOME	$ 352	$ 494	
2. PARENT'S SELF SUPPORT ALLOWANCE ($750 Monthly)	-$ 173	-$ 173	
3. NET INCOME AVAILABLE FOR PRIMARY SUPPORT (Each parent's income from line 1 minus line 2)	$ 179	$ 321	$ 500
4. SHARE OF TOTAL AVAILABE NET INCOME (Each parent's income from line 3 divided by line 3 Combined)	36%	64%	100%
PART II. PRIMARY SUPPORT			
5. CHILDREN'S PRIMARY SUPPORT NEED [1 child = $72] [2 children = $133] [3 children = $188]			$ 72
6. PRIMARY SUPPORT OBLIGATION (Each parent's line 4 multiplied by line 5)	$ 26	$ 46	
PART III. STANDARD OF LIVING ADJUSTMENT (SOLA)			
7. AMOUNT OF INCOME AVAILABLE FOR SOLA (Each parent's line 3 minus line 6)	$ 153	$ 275	
8. STANDARD OF LIVING ADJUSTMENT (SOLA) [1 child = 16%] [2 children = 26%] [3 children = 33%]			16%
9. SOLA AMOUNT (Each parent's line 7 multiplied by line 8)	$ 24	$ 44	
PARTIV. TOTAL MONTHLY CHILD SUPPORT AMOUNT			
10. RECOMMENDED CHILD SUPPORT ORDER (Noncustodial parent's line 6 plus noncustodial parent's line 9. Leave custodial parent column blank.		$ 90	

Hybrid Model

Massachusetts and the District of Columbia use a hybrid between the percentage-of-obligor income model and the Income Shares model. The support order amount is determined

based on a percentage-of-obligor income if the custodial parent's income is below a specified threshold ($15,000 per year net of work-related child care costs in Massachusetts). Once the custodial parent's income reaches that threshold, an Income Shares approach is used.

Economic Basis of Child Support Schedules

Income Shares Guidelines

The Income Shares model explicitly bases its schedule on estimates of child-rearing costs. Specifically, the Income Shares model uses estimates of child-rearing expenditures in intact families. As evident in Exhibit III-4, most Income Shares states either use the Espenshade-Engel estimates (10 states) or the Betson-Rothbarth estimates (18 states). [Both of these estimators are discussed extensively in the previous chapter.] Most Income Shares states originally based their schedules on the Espenshade-Engel estimates. This is not surprising since the Espenshade-Engel estimates were used in the prototype Income Shares model developed for the National Child Support Guidelines Project in the 1980s. They were the best evidence on child-rearing costs available at that time.

Among those Income Shares states that updated their schedules after 1991, most have updated their schedule using the Betson-Rothbarth estimates. This is also not surprising since the Betson-Rothbarth estimates were not released until late 1990. Most of the Income Shares states that continue to use the Espenshade-Engel estimates have never updated or last updated their schedule prior to the release of the Betson-Rothbarth estimates. The only exceptions are Michigan and Rhode Island. Michigan updates their Schedule annually for changes in the price level. The Rhode Island Task Force reviewing the child support guidelines considered updating the Schedule based on the Betson-Rothbarth estimates, but rejected it because they believed the Schedule should be increased ubiquitously and the Schedule based on the Betson-Rotbarth estimates did not indicate increases at every income range.

It should be noted that a few of the Income Shares states based on the Betson-Rothbarth estimates have spliced schedules over the years for various reasons, so only partially base their current schedule on the Betson-Rothbarth estimates.

Also shown in Exhibit III-4 is that there are a handful of Income Shares states that do not use the Espenshade-Engel nor the Betson-Rothbarth estimates (California, Idaho, Kansas and Washington). Each of these states has a unique schedule and their schedules did not originate from the prototype Income Shares model developed through the National Child Support Guidelines Project.

Exhibit III-4 Child-rearing Cost Estimates Underlying Income Shares States	
Estimate of Child-Rearing Costs	**Number of States Basing Guidelines on Estimates**
Espenshade-Engel estimates	10 states [AL, CO, FL, IN, KY, MA, MI, RI, VA & WY]
Betson-Rothbarth estimates	19 states [AZ, CT, IA (higher incomes only), LA (higher incomes only), ME, MO, NE, NC, NJ, NM, OH, OK, OR (higher incomes only), PA, SC, SD, UT (partially), VT & WV]
Other	4 states [ID, CA, KS & WA]

Economic Basis of Non-Income Shares Guidelines

Components of other models relate to other child support costs, but not as explicitly as the Income Shares model. For example, the Melson formula states (Delaware, Hawaii and Montana) typically relate some of their formula parameters to the federal poverty guidelines, but the sources of the other parameters are not clear. Similarly, many states using the percentage-of-obligor-gross income model relate to Wisconsin's modification of economic estimates of child-rearing costs presented in a summary article published by the University of Wisconsin at Madison Institute for Research on Poverty.[26] Most gross income, percentage-of-obligor states use the Wisconsin schedule. It is unknown what most of the percentage-of-obligor net income states use as the economic basis of their guidelines schedules.

COMPARISONS WITH SURROUNDING STATES

This section compares order amounts under the Michigan Formula to bordering states and two other large states.

- ✓ Illinois (a nearby large state);
- ✓ Indiana (a bordering state);
- ✓ Minnesota (a nearby state);
- ✓ Ohio (a bordering state);
- ✓ Pennsylvania (a nearby large state); and,
- ✓ Wisconsin (a bordering state).

Illinois is included because of its close proximity to Michigan. Pennsylvania is included because none of the states bordering Michigan have recently updated their schedules. Pennsylvania is the nearest Income Shares state that has updated its Schedule in the last few years.

[26] Jacques van der Gaag, "On Measuring the Cost of Children." University of Wisconsin-Madison Institute for Research on Poverty, Discussion Paper DP #663-81 (1981).

Overview of States Guidelines in the Comparison

Exhibit III-5 summarizes the underlying bases of the Child Support Schedules of states considered in the comparison. It considers the guidelines model; the income base to which the Schedules are applied; the estimates of child-rearing costs used to develop the Schedules; the year in which the Schedules were last updated; and, the state's population.

Exhibit III-5
Assumptions Underlying Child Support Schedules in Michigan and Comparison States

	Child Support Guidelines Model	Income Base	Estimates of Child-Rearing Costs Underlying Schedule (years of economic data)	Year that Schedule Was Last Updated	State Population and rank (2000 Census)
Michigan	Income Shares	Parents' combined net income	Child-rearing expenditures for older children in intact families estimated by Dr. Espenshade (1972-73) updated to 2000 price levels	2000	9,938,444 (rank is 8th)
Illinois	Flat Percentage-of-Obligor Income	Obligor net income	unknown	1984	12,419,293 (rank is 5th)
Indiana	Income Shares	Parents' combined gross income	Average child-rearing expenditures in intact families estimated by Dr. Espenshade (1972-73) updated to 1987 price levels	1998 (high and low incomes only)	6,080,485 (rank is 14th)
Minnesota	Varying Percentage-of-Obligor Income	Obligor net income	unknown	2001 (highest and lowest income bracket only)	4,919,479 (rank is 21st)
Ohio	Income Shares	Parents' combined gross income	Average child-rearing expenditures in intact families estimated by Dr. Betson using Rothbarth estimator (1980-86) updated to 1992 price levels	1993	11,353,140 (rank is 7th)
Pennsylvania	Income Shares	Parents' combined net income	Average child-rearing expenditures in intact families estimated by Dr. Betson using Rothbarth estimator (1980-86) updated to 1997 price levels	1997	12,281,054 (rank is 6th)
Wisconsin	Flat Percentage-of-Obligor Income	Obligor gross income	Consideration of a literature review and technical discussion of child-rearing cost estimates compiled in a Univ. of Wisc. Institute for Research on Poverty report[27]	1984	5,363,675 (rank is 18th)

[27] van der Gaag, (1981)

Illinois

Dating back to 1984, the Illinois Schedule has not been changed since. It simply bases child support orders on a flat percentage of net income: 20 percent for one child; 25 percent for two children; and, 32 percent for three children. The Illinois guidelines are legislated and it is the responsibility of the Department of Public Aid to conduct periodic reviews.

Indiana

Indiana based its original child support guidelines schedule on the prototype Income Shares model developed for the national Child Support Guidelines Project. Hence, it is based on the Espenshade-Engel estimates of child-rearing costs. The guidelines calculation starts with the gross incomes of each parent. Indiana last reviewed its schedule in 1996-97, it made small changes in the Child Support Schedule. They decreased order amounts for five or more children and expanded the Schedule to include combined gross incomes of $4,000 per week. Prior to the change in 1998, the Schedule only included combined gross incomes of $2,000 per week. Otherwise, the Indiana Schedule has not changed since 1987. Indiana's Guidelines are reviewed and updated by the Supreme Court.

Michigan

The Michigan Formula is based on the prototype Income Shares model developed for the National Child Support Guidelines Project in the 1980s. The prototype model was based on the Espenshade-Engel estimates of child-rearing costs. They still form the basis of the Michigan Formula with three notable exceptions from most Income Shares guidelines that are still based on the Espenshade-Engel estimates. First, Michigan's application adjusts the estimates of child-rearing costs to reflect the costs of older children, rather than children age 0-17 years old. Secondly, the Michigan Formula has been updated annually for changes in the price level. It was last updated in 2001 to include 2000 price levels. Thirdly, the Michigan Formula includes an adjustment for low-income obligors based on the 2000 Federal poverty level for one person. The Michigan Formula is reviewed and updated by the State Court Administrative Office.

Minnesota

Minnesota has the oldest child support guidelines. Minnesota uses a varying percentage of net income, however, most of the variation occurs at relatively low incomes — net incomes below $1,000 per month (about $231 per week). At incomes below this level, a lower percentage is applied than is applied to higher incomes. In effect, this provides an adjustment for low-income obligors. Above net incomes of $1,000 per month (about $231 per week), Minnesota applies 25 percent of net income to arrive at child support obligations covering one child and 30 percent of net income to arrive at child support obligations covering two children. The comparative percentages for Illinois, which also bases its

guidelines on net income, are 20 percent for one child and 25 percent for two children. In short, the Minnesota guidelines are effectively five percentage points higher than the Illinois guidelines for most incomes. The percentage applied to three children in Minnesota is 35 percent.

Ohio

Based on both parents' gross incomes, Ohio's original child support schedule was founded on the prototype Income Shares model developed by the National Child Support Guidelines Project. Subsequently, Ohio was the first state to revise its Schedule for Betson's 1990 estimates of child-rearing expenditures. Ohio adopted the 1990 Betson-Rothbarth estimates as part of its Schedule in 1993. Child support guidelines are legislated in Ohio and reviewed by the Department of Job and Family Services. Since 1993, Ohio has attempted to update its Schedule and adopt a shared-parenting time adjustment formula a few times. The legislative proposals failed largely due to opposition over the shared-parenting time adjustment formula. Opponents were concerned that order amounts would drop too much and that it would be unjust in cases where shared parenting time was not exercised. The existing Ohio Schedule is still the one adopted in 1993, based on 1992 price levels.

Pennsylvania

The Pennsylvania Child Support Schedule was updated in 1997 from its original Schedule developed in 1989. As part of that update, Pennsylvania adopted a schedule based on the 1990 Betson-Rothbarth estimates updated to 1997 price levels. The Pennsylvania Schedule has not been updated since. However, a guidelines review is scheduled for this year. In 1997, Pennsylvania conducted a major overhaul of its child support guidelines. This included the provision of a formula for shared-parenting time and a low-income adjustment formula. The Pennsylvania Guidelines are incorporated into their Rules of Civil Procedure, and are reviewed by the Department of Public Welfare.

Wisconsin

The Wisconsin Guidelines are also one of the oldest guidelines in the nation. They have never been updated. The Wisconsin Guidelines use a flat percentage-of-obligor gross income; specifically, 17 percent for one child; 25 percent for two children; and, 29 percent for three children. Wisconsin's Department of Workforce Development is currently conducting its quadrennial review of its child support guidelines. In response to recent criticisms from noncustodial parents' advocacy groups, Wisconsin is reviewing its basic guidelines model and treatment of high incomes. One criticism is that the Wisconsin Schedule amounts are invariable to the custodial parent income. Regardless, whether the custodial parent has extremely low or high income, the order amount under the existing Schedule is set at the same level as long as the noncustodial parent's income is the same. Further, since the Wisconsin guideline is based on a flat percentage of obligor gross income,

child support orders as a proportion of obligor after-tax income increase as obligor income increases, due to the progressiveness of the Federal and State personal income tax rates. This issue is of gravest concern to high-income obligors who face higher tax rates. Other major concerns of the committee pertain to adjustment for shared-parenting, additional dependents and low-income obligors.

Summary

As evident in Exhibit III-5, all of the states bordering Michigan (i.e., Indiana, Ohio and Wisconsin) use either the Income Shares model or the percentage-of-obligor income as the bases of their child support guidelines. All of the bordering states base their guidelines on gross income. The bordering states have not been as diligent as Michigan in updated their Schedules. Ohio is the only bordering state that has ever updated its entire Schedule. Wisconsin has never made any changes to its Schedule. The other three states (Illinois, Minnesota and Pennsylvania) considered in this analysis are very different. Illinois has never updated its Schedule. Minnesota has only made small modifications to its low and high income brackets. Pennsylvania has updated its Income Shares Schedule to the 1990 Betson-Rothbarth estimates, updated to 1997 price levels.

Comparison of Schedule Amounts

This section provides graphical comparisons of State child support schedules listed in Exhibit III-5. Since most states base their child support guidelines on monthly amounts and Michigan bases its on weekly amounts, dollar amounts are converted from monthly to weekly amounts whenever mentioned in this discussion.

In order to avoid confusion of too many lines on the graphs, Minnesota is dropped from the analysis because of its similarity to Illinois. Minnesota tracks about five percentage points higher for one and two children. In summary, the graphical comparisons consider:

- ✓ Michigan,
- ✓ Illinois,
- ✓ Indiana,
- ✓ Ohio,
- ✓ Pennsylvania, and
- ✓ Wisconsin.

The comparisons are for 1, 2 and 3-child households respectively. The graphs depict order levels under the assumption that the obligee has no income. Similar comparisons for situations when the obligee has half as much income as the obligor, and income equal to that of the obligor are displayed in Exhibits III-9 and III-10 for two-child cases, respectively. The situation where obligee has half as much income as the obligor approximates situations where the mother is the obligee and the father is the obligor and their income ratios

approximate median female to male earnings ratios.[28] The comparable exhibits for one and three children are provided in Appendix II.

The figures display levels of support obligations as percentages of obligor net income across a range of incomes from $150 to $1,500 per week. An important consideration is that in reading the figures the x-axis is not an interval level scale. That is, although support is shown as a proportion of net income for each $50 increase in income through $500 per week, the scale changes to $100 income increases through the remainder of the income range. As a result, the fairly rapid descent of the curves above $500 per week is an artifact of the income scale used in the figures. The actual curves would decline much more slowly if $50 income increments had been used throughout the income range.

A further point is that the curves for states in which the support obligation is computed as a proportion of gross income C Indiana, Ohio, and Wisconsin C are shown net of current taxes. Thus, the curves compare directly what obligors are paying as a proportion of net income under all of the schedules, regardless of differences in state tax rates.

It is useful to note that these comparisons assume there are no additional expenses, such as child care costs or children's extraordinary medical expenses. In most Income Shares states, a formulaic adjustment is made for these factors. In the percentage-of-obligor income guidelines, the treatment of these special factors is mixed. Sometimes there is a formulaic adjustment, sometimes a deviation is permissible but a formula is not specified and sometimes the factor is not addressed.[29]

Exhibit III-6: One Child, Obligee Income = $0

Exhibit III-6 displays support obligations for a range of obligor net incomes from $150 to $1,500 per week. In this scenario involving one child, the obligee has no income.

Income Shares States. The trends representing each State's Schedule as obligor net income increases, reflect the guidelines models that the States use. All of the Income Shares States (i.e., Michigan, Indiana, Ohio, and Pennsylvania) show the proportion of obligor net income assigned to child support generally decreasing as obligor income increases. (The only exception is at low incomes due to the low-income adjustments, which are discussed later.)

[28] The actual ratio of female to male earnings is 68 percent, but this considers all females and males, not those with children. The ratio is likely to be lower when only females with children are considered because females with younger children are less likely to work outside the home and the average hours worked vary with the age of the child. [U.S. Department of Labor Bureau of Labor Statistics ,*Highlights of Women's Earnings in 2000*. Report 952 (August 2001) and *Employment Characteristics of Families,* USDL-02-175 March 2002)].

[29] In most Income Shares states, the child care expenses and the child's extraordinary medical expenses are excluded from the estimates of child-rearing expenditures used to develop the schedule. This is because the actual costs of these expenses are added to the base support order. It is unknown whether they are excluded from the Illinois, Minnesota and Wisconsin Schedule.

These trends ensue from the economic estimates of child-rearing expenditures that form the bases of Income Shares Schedules, these estimates indicate that child-rearing expenditures as a proportion of net income decrease as income increases.

The differences between the trends of the Income Shares States reflect the different economic estimates used by these States and the different years in which these Schedules were last updated. The year is important because price levels and tax rates in gross-income Income Shares States in that year are incorporated into the Schedules. Generally, Michigan and Pennsylvania track the most closely among the Income Shares States because they are based on the most recent price levels (2000 and 1997, respectively) and are void of any changes in tax rates since they are both based on net income. Nonetheless, the difference between the Michigan and Pennsylvania Schedules reflects that they are based on two different sets of child-rearing cost estimates. The Michigan Formula is based on the Espenshade-Engel estimates from 1972-73 data. The Pennsylvania Schedule is based on the Betson-Rothbarth estimates from 1980-86 data. The differences in these two estimates are discussed in the previous chapter.

Percentage-of-obligor Income States. The percentage-of-obligor income States evidence much different trends. Obligations under the Illinois Schedule are depicted as a flat line at 20 percent of obligor net income because this is the Schedule amount. Obligations under the Wisconsin Schedule are increasing as obligor net income increases. Since the Wisconsin Schedule is based on gross income and tax rates are progressive, when the Wisconsin Schedule is converted to net income amounts, child support obligations as a proportion of obligor net income increase.

Low Incomes. In this scenario, Michigan, Ohio, and Pennsylvania are the only States shown in Exhibit III-6 that have an adjustment for low-income noncustodial parents. This is why these States have the lowest order amounts when obligor net monthly income is $150 per week (12, 8 and 14 percent of obligor net income, respectively). Nonetheless, the low-income adjustment quickly phases out. By obligor net incomes of $200 per week, Michigan support obligations are among the highest, 27 percent of obligor net income. Obligations among the other States when obligor net income is $200 per week range from 20 to 28 percent of obligor net income.

Mid- to High-Incomes. Generally, obligations under the Michigan Formula are the highest from obligor net incomes of $200 to $500 per week. After obligor net incomes of $500 per week, Michigan tracks in the middle to the lower end of the range of all of the Schedules considered in Exhibit III-6.

Exhibit III-7: Two Children, Obligee Income = $0

The trends evidenced in Exhibit III-7, that considers two children, share many similarities with the trends evidenced in Exhibit III-6, that considers one child.

- ✓ Obligations in Income Shares States (i.e., Michigan, Indiana, Ohio, and Pennsylvania) generally decrease as a proportion of obligor net income as income increases. This reflects the economic evidence of child-rearing costs that suggest this trend.

- ✓ In general, across all income levels, obligations under Michigan and Pennsylvania track closer than other Income Shares States. Despite Michigan and Pennsylvania stemming from different economic estimates of child-rearing costs, these States have updated their Schedules recently (2000 and 1997, respectively), whereas the Schedules from the other Income Shares States are based on much older price levels. (Ohio is based on 1993 price levels and Indiana predates that.) Although Michigan and Indiana are both based on Dr. Espenshade's economic estimates of child-rearing costs, Indiana has not updated its gross-to-net income conversion that is invisibly incorporated into the Schedule for over a decade. Since the effective tax rate has decreased for lower incomes, they now have more income available for child support. Conversely, with the expansion of the Medicare tax and the increase in the maximum amount of income that FICA is applied, the effective tax rate has increased for higher incomes.

- ✓ Percentage-of-obligor income states evidence the same trend in Exhibit III-7. Obligations under the Illinois Schedule are a consistent, flat percentage of obligor net income (25 percent). Obligations under the Wisconsin Schedule increase as obligor net income increases.

- ✓ Again, Michigan, Ohio and Pennsylvania are the only States considered in Exhibit III-7 that apply a low-income adjustment when obligor net income is $150 per week. The Michigan and Ohio low-income adjustment also applies at obligor net income of $200, as the low-income adjustment phases at higher incomes as the number of children increases.

- ✓ Obligations under the Michigan Formula track above all other States from obligor net incomes of $250 to $500 per month. This occurs because the economic estimates of child-rearing costs that the Michigan Formula is based on (Espenshade's estimates) are generally higher than the Betson-Rothbarth estimates, which form the basis of the Ohio and Pennsylvania Schedules. The fact that Michigan is based on more recent price levels (2000) than any of the other States compounds the difference.

- ✓ Obligations under the Michigan Formula track in about the middle of the range for obligor net incomes in excess of $450 per month. Excluding the anomalous trend evidenced by Wisconsin, the Michigan obligations track fairly closely to those of other Great Lakes States.

Exhibit III-8: Three Children, Obligee Income = $0

Exhibit III-8 considers the scenario when there are three children. It generally displays the same trends as the scenarios with one and two children, which were depicted in Exhibits III-6 and III-7.

- ✓ Obligations under the Michigan Formula track higher than most Income Shares States for obligor incomes more than $250 per week. Again, this is largely due to Michigan being based on the Espenshade estimates of child-rearing costs that are updated to 2000 price levels. Ohio and Pennsylvania base their Schedules on the Betson-Rothbarth estimates of child-rearing costs that are much lower for three children.

- ✓ Obligations under the Indiana Schedule track closest to those under Michigan because it is also based on the Espenshade estimates of child-rearing costs, but the Indiana Schedule has not been updated for changes in the price levels. A further difference is that the Indiana Schedule is based on gross income but incorporates tax rates in existence over a decade ago.

Exhibit III-9: Two Children, Obligee Income = 50% of Obligor's Income

Exhibit III-9 considers the scenario where there are two children and the obligee has half as much income as the obligor. That is, if the obligor has a net income of $1,000 per week, the obligee is assumed to have a net income of $500; if the obligor earns $1,200, the obligee earns $600. The following observations can be made from Exhibit III-9.

- ✓ Obligations under Income Shares States (i.e., Michigan, Indiana, Ohio, and Pennsylvania) decrease as a proportion of obligor net income as obligor income increases.

- ✓ Obligations under the percentage of Income States are the same as when the obligee had income. Obligations under the Illinois Schedule continue to be 25 percent of net income across the range of obligor net incomes considered in Exhibit III-9. Obligations under the Wisconsin Schedule are also identical to those in the scenario where the obligee has no income because the Wisconsin Schedule is invariable to obligee income.

With the exception of Wisconsin, obligations under the Michigan Formula are generally higher than most other States considered in Exhibit III-9. In addition, the gap between Michigan and most of the states appears to widen from when the scenario when obligee had no income (see Exhibit III-7) For example, when the obligee had no income and obligor net income was $600 per month, there was a zero dollar gap between the support amounts under the Michigan and Pennsylvania Schedules. However, when the same scenario is

considered except the obligee has now $300 per month in net income, the gap is now nine dollars per week between the Michigan and Pennsylvania Schedules.
The notable differences between the scenarios when the obligee has no income (Exhibit III-7) and the obligee has income (Exhibit III-9) among Income Shares States follow.

- ✓ Obligations are generally higher in Exhibit III-7 than those in Exhibit III-9 because the obligor assumes full responsibility for the child-rearing expenditures when the obligee has no income. For example, as shown in Exhibit III-7, when obligor net income is $500 per week and the obligee has no income, the obligation is set at 36 percent of obligor net income in Michigan. In comparison, as shown in Exhibit III-9, when obligor net income is $500 per week and the obligee has half that income, $250 per week, the obligation is set at 32 percent of obligor net income in Michigan. Similar differences can be noted in all of the Income Shares States.

- ✓ In Exhibit III-9, when obligor net income is $150 per week, only the Michigan and Pennsylvania Schedules apply a low-income adjustment. In Exhibit III-7, Ohio also applied a low-income adjustment. The Ohio low-income adjustment only applied to this income level when the obligee had no income. This is an anomaly of the Ohio low-income adjustment formula and many early Income Shares Schedules. The Michigan and Pennsylvania low-income adjustment formulas do not contain a similar anomaly.

- ✓ Another observation to note from Exhibit III-9 is that the Ohio obligations end when obligor net weekly income is $1,200, which implies that obligee net weekly income is $600, and the total combined net income is $1,800 per week. This occurs because the Ohio Schedule stops at combined gross incomes of $150,000 per year. This is equivalent to about $1,800 net income per week.

Exhibit III-10: Two Children, Obligee Income = Obligor Income

Exhibit III-10 considers the scenario when there are two children and obligee income equals obligor income. The trends in this scenario are similar to the scenario where there were two children and obligee income was 50 percent of obligor income (as shown in Exhibit III-9). Yet, there are small differences.

- ✓ Obligations in Income Shares states are generally even lower when the obligee income is equivalent to the obligor income than when obligee income was 50% of obligor income. For example, when obligor net income is $500 per week, then the obligation under the Michigan Formula would be 30 percent of obligor net income if the obligee also has net income of $500 per week. If obligee income is only half that (i.e., $250 net per week), the obligation would be 32 percent of obligor net income under the Michigan Formula.

- ✓ Obligations under the Ohio Schedule are no longer calculated once obligor net income reaches $900 per week because in this scenario, the obligee would also have net income

of $900 per week. The combined net income would be $1,800 per week. This approximates the net equivalent to the maximum amount of combined gross income considered under the Ohio Schedule.

COMPARISONS WITH THE MELSON FORMULA AND HYBRID FORMULA

As mentioned earlier, a handful of states use alternative guidelines models. Delaware, Hawaii and Montana use the Melson formula. A hybrid between the percentage-of-obligor income model and the Income Shares model is used by the District of Columbia and Massachusetts.

Delaware's Application of the Melson Formula

An example of the Melson formula is displayed in Exhibit III-3. That particular example uses parameters from Delaware's application of the Melson formula that assumes that children are entitled to the following primary support.

- ✓ $310 per month ($72 per week) for one child;
- ✓ $575 per month ($133 per week) for two children; and
- ✓ $815 per month ($188 per week) for three children.

Primary support is apportioned to the parents according to each parent's adjusted net income. If the noncustodial parent has any adjusted net income after his or her share of the child's primary support, an additional percentage of that remainder is applied to child support. This allows the children to share in the same standard of living the noncustodial parent can afford. These percentages are called the "Standard of Living Allowance (SOLA)" in the Melson formula. Delaware's SOLA amounts are:

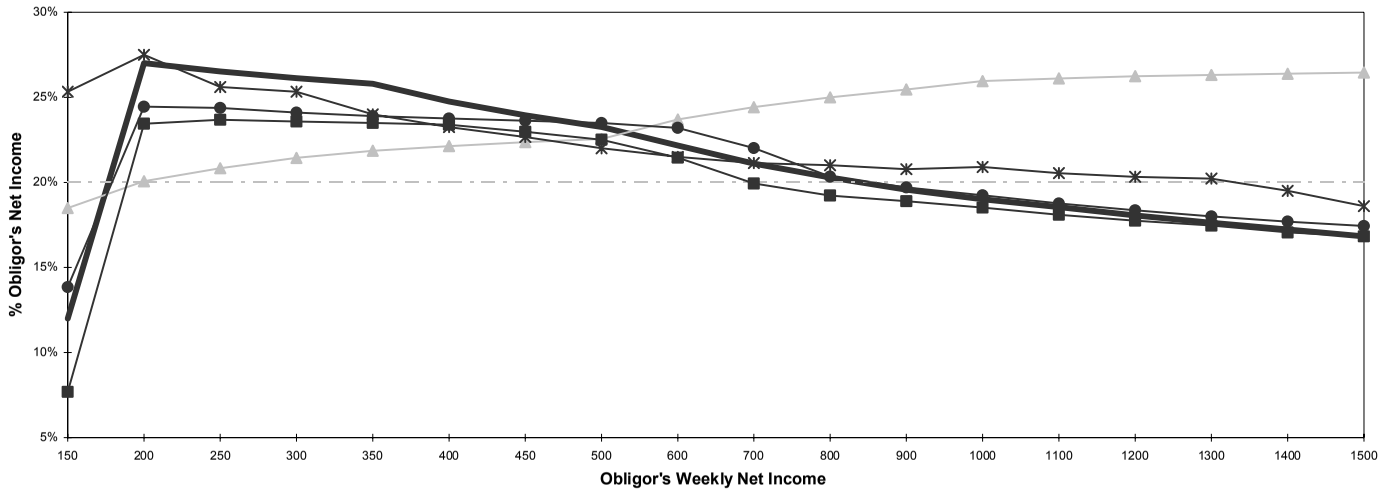
- ✓ 16 percent for one child;
- ✓ 26 percent for two children; and
- ✓ 33 percent for three children.

Massachusetts' Application of the Hybrid Approach

The Massachusetts Guideline applies the following percentages to obligor gross weekly income if the custodial parent's income is less than $15,000 per year net of child care costs.

Gross Weekly Income	One Child	Two Children	Three Children
$0-$125	Discretion of the court, but not less than $50 per month		
$125-$200	15%	18%	21%
$201-$500	25%	28%	31%
$501-maximum	27%	30%	33%
All of the percentages can be increased or decreased by 2 percent in the discretion of the court			

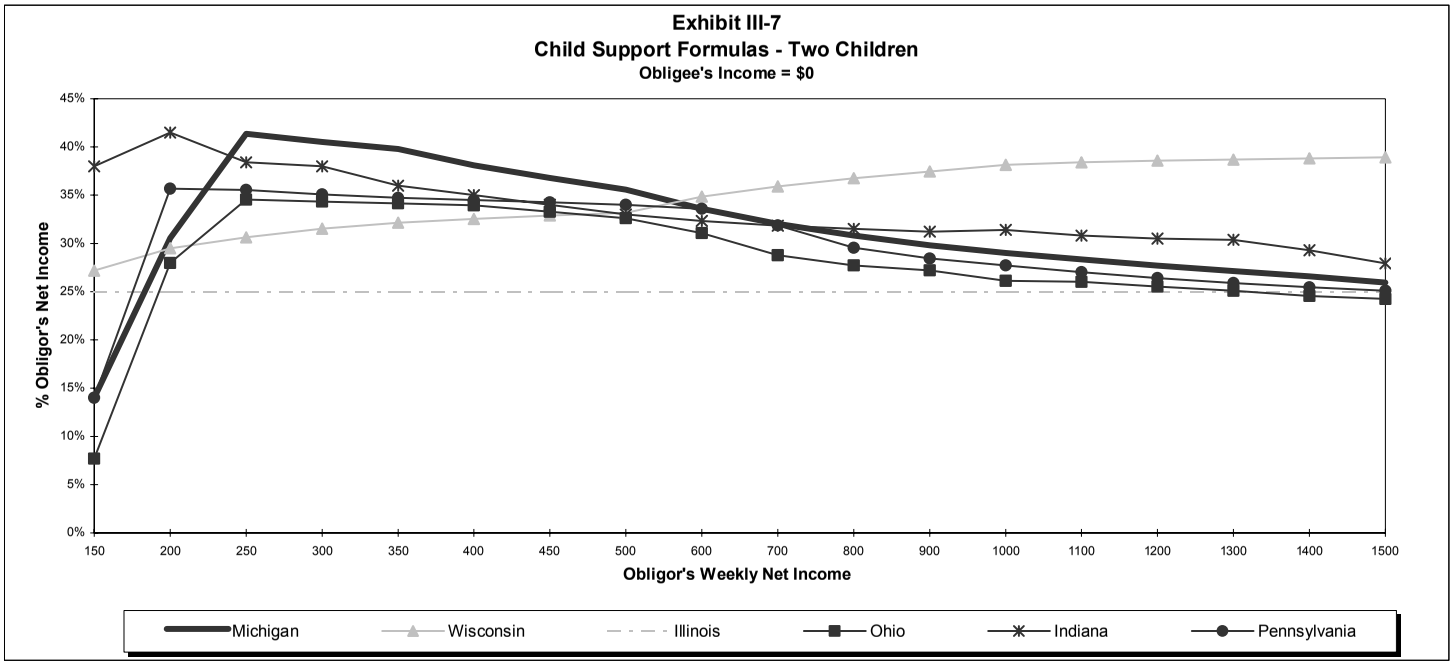
Exhibit III-6
Child Support Formulas - One Child
Obligee's Income = $0



CHILD SUPPORT FORMULAS - ONE CHILD
Obligee's Income = $0

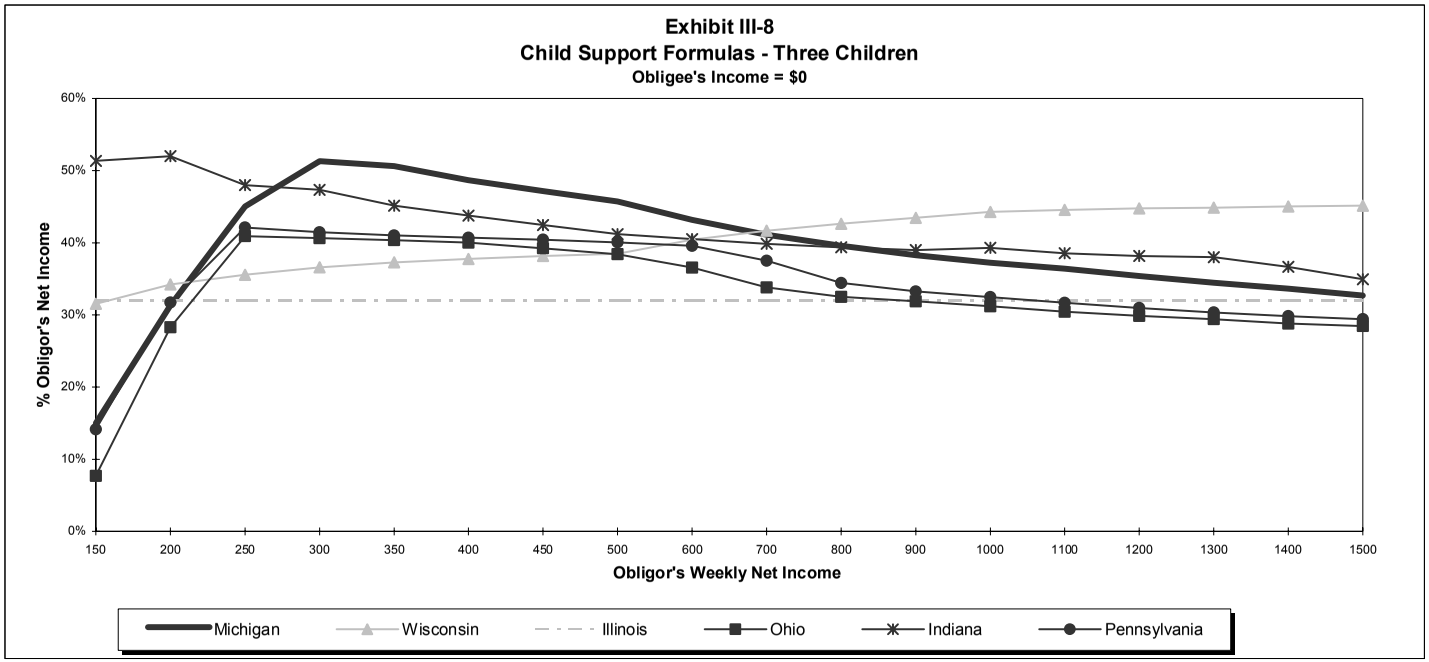
Support Due ($$ per week)						
Obligor's Net Weekly Income	Michigan	Wisconsin	Illinois	Ohio	Indiana	Pennsylvania
150	18	28	30	12	38	21
200	54	40	40	47	55	49
250	66	52	50	59	64	61
300	78	64	60	71	76	72
350	90	77	70	82	84	84
400	99	89	80	94	93	95
450	108	101	90	103	102	106
500	116	113	100	113	110	117
600	133	142	120	129	129	139
700	148	171	140	140	148	154
800	162	200	160	154	168	163
900	176	229	180	170	187	177
1000	190	260	200	185	209	192
1100	204	287	220	199	226	206
1200	217	315	240	213	244	220
1300	229	342	260	227	263	234
1400	241	369	280	239	273	248
1500	252	397	300	252	279	261

% of Obligor's Net Income						
Obligor's Net Weekly Income	Michigan	Wisconsin	Illinois	Ohio	Indiana	Pennsylvania
150	12%	18%	20%	8%	25%	14%
200	27%	20%	20%	23%	28%	24%
250	27%	21%	20%	24%	26%	24%
300	26%	21%	20%	24%	25%	24%
350	26%	22%	20%	23%	24%	24%
400	25%	22%	20%	23%	23%	24%
450	24%	22%	20%	23%	23%	24%
500	23%	23%	20%	23%	22%	23%
600	22%	24%	20%	21%	22%	23%
700	21%	24%	20%	20%	21%	22%
800	20%	25%	20%	19%	21%	20%
900	20%	25%	20%	19%	21%	20%
1000	19%	26%	20%	19%	21%	19%
1100	19%	26%	20%	18%	21%	19%
1200	18%	26%	20%	18%	20%	18%
1300	18%	26%	20%	17%	20%	18%
1400	17%	26%	20%	17%	20%	18%
1500	17%	26%	20%	17%	19%	17%



CHILD SUPPORT FORMULAS - TWO CHILDREN
Obligee's Income = $0

	Support Due ($$ per week)						% of Obligor's Net Income						
Obligor's Net Weekly Income	Michigan	Wisconsin	Illinois	Ohio	Indiana	Pennsylvania	Obligor's Net Weekly Income	Michigan	Wisconsin	Illinois	Ohio	Indiana	Pennsylvania
150	21	41	38	12	57	21	150	14%	27%	25%	8%	38%	14%
200	61	59	50	56	83	71	200	31%	30%	25%	28%	42%	36%
250	103	77	63	86	96	89	250	41%	31%	25%	35%	38%	36%
300	122	95	75	103	114	105	300	41%	32%	25%	34%	38%	35%
350	139	113	88	120	126	122	350	40%	32%	25%	34%	36%	35%
400	152	130	100	136	140	138	400	38%	33%	25%	34%	35%	34%
450	166	148	113	150	153	154	450	37%	33%	25%	33%	34%	34%
500	178	166	125	163	165	170	500	36%	33%	25%	33%	33%	34%
600	202	209	150	186	194	202	600	34%	35%	25%	31%	32%	34%
700	224	251	175	202	223	223	700	32%	36%	25%	29%	32%	32%
800	247	294	200	222	252	236	800	31%	37%	25%	28%	32%	30%
900	268	337	225	245	281	256	900	30%	37%	25%	27%	31%	28%
1000	290	382	250	261	314	277	1000	29%	38%	25%	26%	31%	28%
1100	312	422	275	286	339	297	1100	28%	38%	25%	26%	31%	27%
1200	332	463	300	306	366	317	1200	28%	39%	25%	26%	31%	26%
1300	353	503	325	326	395	337	1300	27%	39%	25%	25%	30%	26%
1400	372	543	350	344	410	357	1400	27%	39%	25%	25%	29%	25%
1500	389	584	375	364	419	377	1500	26%	39%	25%	24%	28%	25%

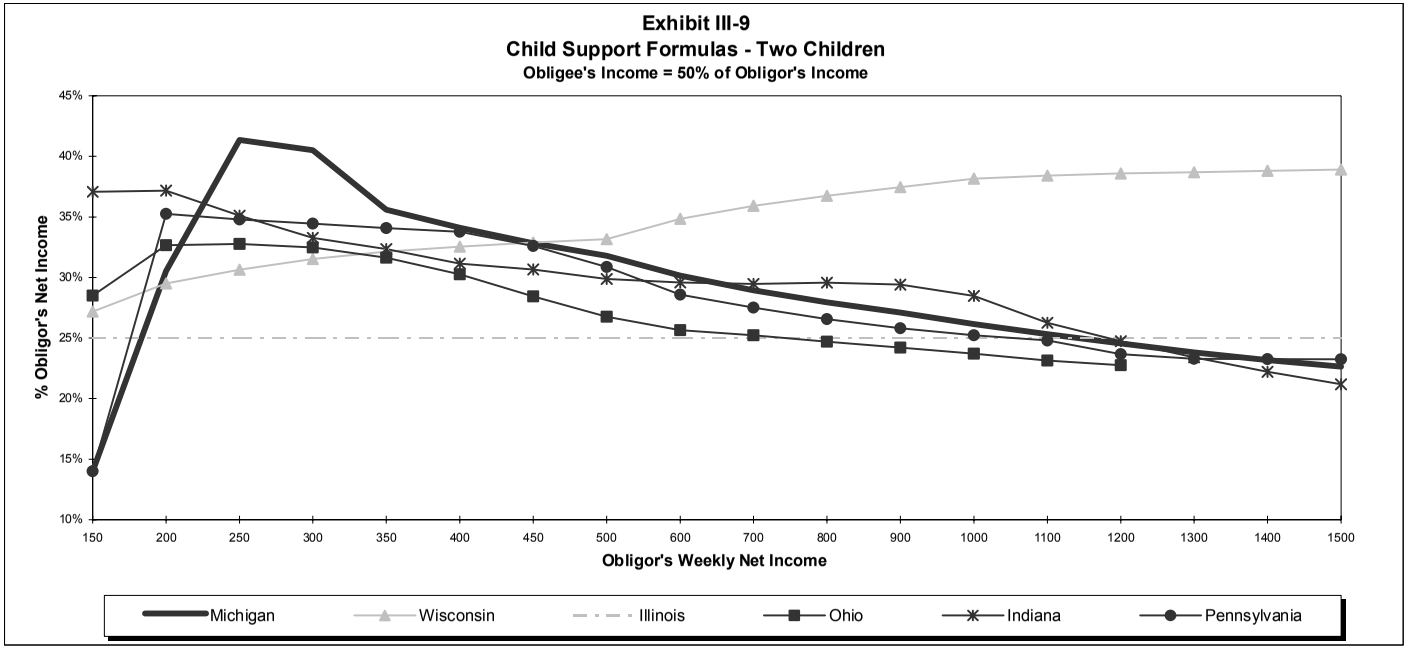


CHILD SUPPORT FORMULAS - THREE CHILDREN
Obligee's Income = $0

Support Due ($$ per week)						
Obligor's Net Weekly Income	Michigan	Wisconsin	Illinois	Ohio	Indiana	Pennsylvania
150	23	47	48	12	77	21
200	63	68	64	57	104	63
250	113	89	80	102	120	105
300	154	110	96	122	142	124
350	177	131	112	141	158	144
400	195	151	128	160	175	163
450	212	172	144	177	191	182
500	229	192	160	192	206	200
600	259	243	192	219	243	237
700	288	292	224	237	279	263
800	317	341	256	260	315	276
900	345	391	288	287	351	299
1000	373	443	320	312	393	325
1100	401	490	352	335	424	348
1200	425	537	384	359	458	371
1300	448	583	416	382	494	394
1400	471	630	448	403	513	417
1500	490	677	480	427	524	441

% of Obligor's Net Income						
Obligor's Net Weekly Income	Michigan	Wisconsin	Illinois	Ohio	Indiana	Pennsylvania
150	15%	32%	32%	8%	51%	14%
200	31%	34%	32%	28%	52%	32%
250	45%	36%	32%	41%	48%	42%
300	51%	37%	32%	41%	47%	41%
350	51%	37%	32%	40%	45%	41%
400	49%	38%	32%	40%	44%	41%
450	47%	38%	32%	39%	42%	40%
500	46%	38%	32%	38%	41%	40%
600	43%	40%	32%	37%	41%	40%
700	41%	42%	32%	34%	40%	38%
800	40%	43%	32%	33%	39%	34%
900	38%	43%	32%	32%	39%	33%
1000	37%	44%	32%	31%	39%	32%
1100	36%	45%	32%	30%	39%	32%
1200	35%	45%	32%	30%	38%	31%
1300	34%	45%	32%	29%	38%	30%
1400	34%	45%	32%	29%	37%	30%
1500	33%	45%	32%	28%	35%	29%

Exhibit III-9
Child Support Formulas - Two Children
Obligee's Income = 50% of Obligor's Income



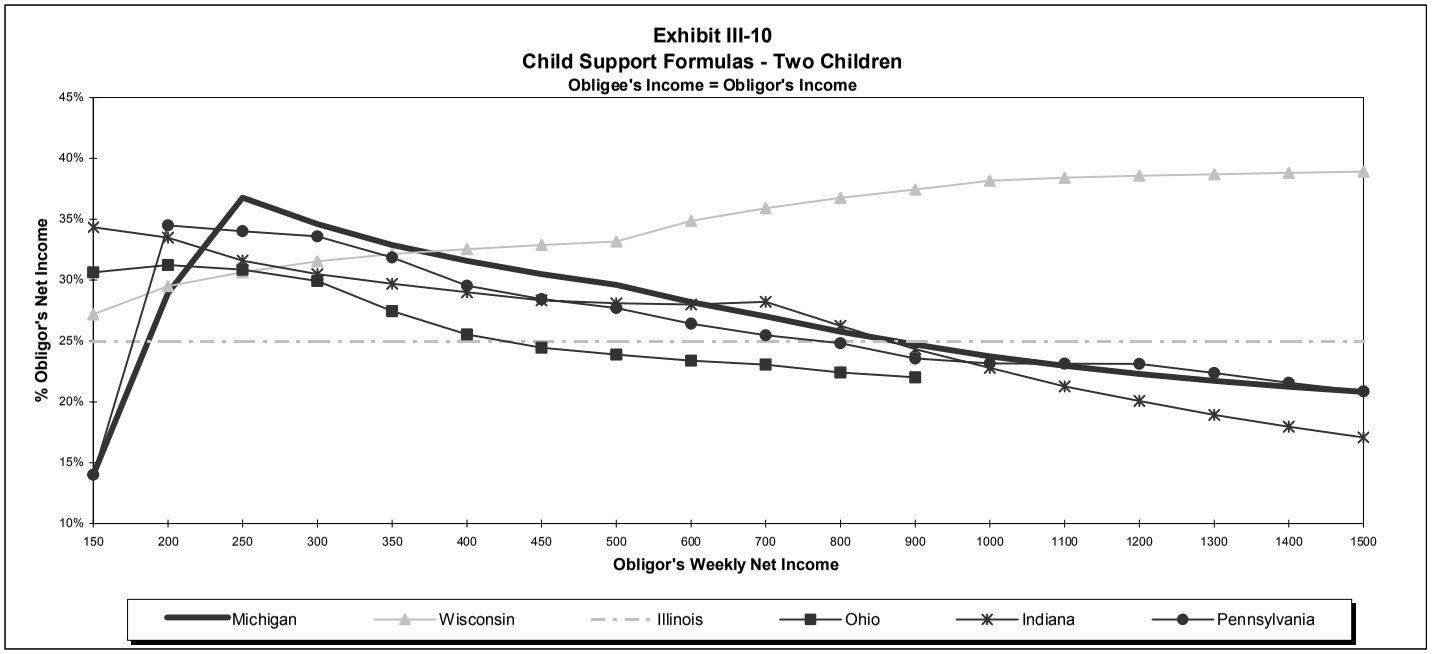
CHILD SUPPORT FORMULAS - TWO CHILDREN
Obligee's Income = 50% of Obligor's Income

Support Due ($$ per week)

Obligor's Net Weekly Income	Michigan	Wisconsin	Illinois	Ohio	Indiana	Pennsylvania
150	21	41	38	43	56	21
200	61	59	50	65	74	71
250	103	77	63	82	88	87
300	122	95	75	97	100	103
350	125	113	88	111	113	119
400	136	130	100	121	125	135
450	148	148	113	128	138	147
500	159	166	125	134	149	154
600	181	209	150	154	178	172
700	203	251	175	177	206	193
800	224	294	200	198	237	212
900	244	337	225	218	265	232
1000	262	382	250	237	285	252
1100	279	422	275	254	289	273
1200	295	463	300	273	297	284
1300	310	503	325	-	304	303
1400	325	543	350	-	311	326
1500	340	584	375	-	318	349

% of Obligor's Net Income

Obligor's Net Weekly Income	Michigan	Wisconsin	Illinois	Ohio	Indiana	Pennsylvania
150	14%	27%	25%	29%	37%	14%
200	31%	30%	25%	33%	37%	35%
250	41%	31%	25%	33%	35%	35%
300	41%	32%	25%	32%	33%	34%
350	36%	32%	25%	32%	32%	34%
400	34%	33%	25%	30%	31%	34%
450	33%	33%	25%	28%	31%	33%
500	32%	33%	25%	27%	30%	31%
600	30%	35%	25%	26%	30%	29%
700	29%	36%	25%	25%	29%	28%
800	28%	37%	25%	25%	30%	27%
900	27%	37%	25%	24%	29%	26%
1000	26%	38%	25%	24%	28%	25%
1100	25%	38%	25%	23%	26%	25%
1200	25%	39%	25%	23%	25%	24%
1300	24%	39%	25%		23%	23%
1400	23%	39%	25%		22%	23%
1500	23%	39%	25%		21%	23%



CHILD SUPPORT FORMULAS - TWO CHILDREN
Obligee's Income = Obligor's Income

Support Due ($$ perweek)

Obligor's Net Weekly Income	Michigan	Wisconsin	Illinois	Ohio	Indiana	Pennsylvania
150	21	41	38	46	52	21
200	58	59	50	62	67	69
250	92	77	63	77	79	85
300	104	95	75	90	92	101
350	115	113	88	96	104	112
400	126	130	100	102	116	118
450	137	148	113	110	128	128
500	148	166	125	119	141	139
600	169	209	150	140	168	159
700	189	251	175	161	198	178
800	206	294	200	179	210	198
900	222	337	225	198	219	212
1000	237	382	250	-	228	232
1100	252	422	275	-	234	254
1200	267	463	300	-	241	277
1300	282	503	325	-	246	291
1400	297	543	350	-	252	302
1500	312	584	375	-	256	313

% of Obligor's Net Income

Obligor's Net Weekly Income	Michigan	Wisconsin	Illinois	Ohio	Indiana	Pennsylvania
150	14%	27%	25%	31%	34%	14%
200	29%	30%	25%	31%	34%	34%
250	37%	31%	25%	31%	32%	34%
300	35%	32%	25%	30%	31%	34%
350	33%	32%	25%	27%	30%	32%
400	32%	33%	25%	26%	29%	30%
450	30%	33%	25%	24%	28%	28%
500	30%	33%	25%	24%	28%	28%
600	28%	35%	25%	23%	28%	26%
700	27%	36%	25%	23%	28%	25%
800	26%	37%	25%	22%	26%	25%
900	25%	37%	25%	22%	24%	24%
1000	24%	38%	25%		23%	23%
1100	23%	38%	25%		21%	23%
1200	22%	39%	25%		20%	23%
1300	22%	39%	25%		19%	22%
1400	21%	39%	25%		18%	22%
1500	21%	39%	25%		17%	21%

If the custodial parent's income is more than $15,000 per year net of child care costs, the percentages are applied to the combined gross income of the parents less the first $15,000 of custodial parent income and child care costs. In turn, this amount is apportioned to the parents similar to the Income Shares calculation to arrive at the noncustodial parent's child support obligation.

Graphical Comparisons of the Melson Formula and Hybrid Approach

Exhibits III-11 through III-13 compare child support obligations under the existing Michigan Formula, Delaware's application of the Melson formula, and Massachusetts' Hybrid approach for two children using the same range of obligor net weekly incomes as earlier graphical comparisons. The exhibits vary by the amount of obligee income: Exhibit III-11 assumes that the obligee has no income; Exhibit III-12 assumes that obligee income is half that of obligor income; and, Exhibit III-13 assumes that obligee income is equal to obligor income. These assumptions are identical to those made in earlier graphical comparisons. They are used to illustrate the impact of obligee income on the child support order amounts using the different guidelines models.

Exhibit III-11: Two Children, Obligee Income = $0

Exhibit III-11 shows that the Michigan and Delaware formulas closely track each other when the obligee has no income and when the obligor's income is in mid range (about $300 to $600 per week). Below obligor incomes of $300 per week, Michigan obligations generally track above those of Delaware because Delaware has a more generous adjustment for low-income obligors. Above obligor incomes of $600 per week, the gap between the Income Shares model and Melson formula widens. Order amounts under the Income Shares model (as depicted by Michigan) continue to steadily decrease as a percentage of obligor net monthly income, whereas they decrease more slowly under the Melson formula (as depicted by Delaware). This occurs because the economic evidence of child-rearing, which forms the basis of the Michigan Formula, suggests a continuous decrease in the percentage of income devoted to child-rearing expenditures as income increases. In contrast, the Melson formula applies a flat percentage (i.e., the SOLA) to increases in income.

In this scenario where the obligee has no income, the Hybrid Approach (which is depicted by Massachusetts) functions much like the percentage-of-obligor gross income model. Obligations under the Massachusetts guidelines steadily increase as a proportion of net income because of the progressive tax rate. This is similar to what was displayed in the comparisons to Wisconsin, which bases its guidelines model on a percentage-of-obligor gross income.

Exhibit III-12: Two Children, Obligee Income = 50% of Obligor Income

Exhibit III-12 compares order amounts for two children when the obligee has half as much income as the obligor. The most striking difference between the situation when the obligee had no income (Exhibit III-11) and this scenario where the obligee has income, is the effect it has on order amounts under the Massachusetts guidelines. When the obligee had no income, support orders as a percentage of obligor net income increased as obligor net income increased. This is because the Massachusetts guideline functions like a percentage-of-obligor gross income guideline if the obligee has no income. However, once obligee income exceeds $15,000 per year ($288 per week gross), the Massachusetts guideline begins to function more like an Income Shares model; that is, the order amounts as a percentage of obligor net income decrease. This becomes evident when obligor net income moves from $400 to $500 per week. The respective child support orders at these income levels are 39 and 37 percent of obligor net income. In fact, the child support order as a percentage of obligor income is at its peak in Massachusetts when obligor income is $400 per week. When obligor net weekly income moves from $400 to $500 per week, obligee net income would move from $200 to $250 per week. (Recall, that obligee income is half that of obligor income in this scenario). Hence the Income Shares model kicks in because the $15,000 per year threshold is finally exceeded.

The comparisons between Michigan and Delaware are similar to what was noted in the scenario when the obligee had no income (see Exhibit III-11). Michigan tracks somewhat above Delaware for low-income obligors because Delaware has a more generous low-income adjustment. Further, like the scenario where the obligee had no income, the Michigan Guidelines show a more precipitous decline in order amounts when expressed as a portion of obligor net income than Delaware and Massachusetts. This is because the Michigan Formula is founded on economic estimates of child-rearing costs that suggest that the proportion of total net income spent on the children declines as income increases. Delaware shows less of a precipitous decline because the SOLA is a flat percentage that does not decrease as income increases. Similarly, Massachusetts applies the same percentage (37 percent) to all incomes above $501 per week, the percentage is never lower.

Exhibit III-13: Two Children, Obligee Income = Obligor's Income

Exhibit III-13 depicts the scenario when obligee income equals obligor income. The trends are similar to those already evident in Exhibits III-11 and III-12.

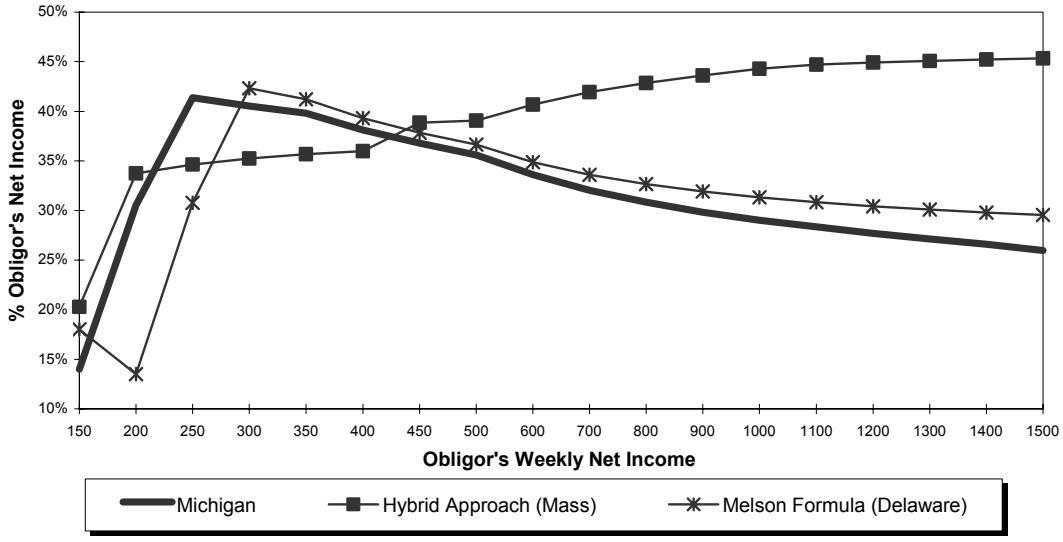
- ✓ Support orders at low-incomes are less in the Delaware formula than the Michigan Formula due to a more generous adjustment for low-income obligors.

- ✓ Support orders as a percentage of obligor net income under the Michigan Formula decrease more precipitously than the other formulas because the Michigan Formula is

based on the economic estimates of child-rearing expenditures which find that the percent of total net income spent on children decreases as income increases.

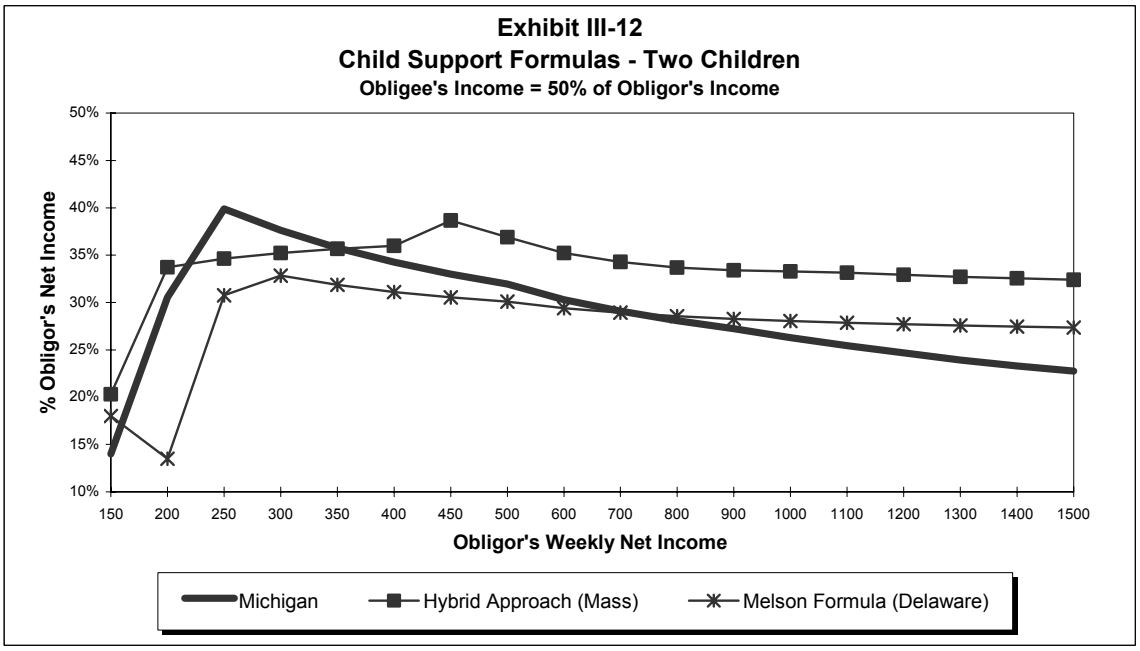
- ✓ Support orders as a percentage of obligor net income tend to flatten for the Delaware and Massachusetts formulas because of the SOLA in the Delaware formula, and because Massachusetts applies the same percentage of gross income to child support once gross income exceeds $500 per week.

Exhibit III-11
Child Support Formulas - Two Children
Obligee's Income = $0



CHILD SUPPORT FORMULAS - TWO CHILDREN
Obligee's Income = $0

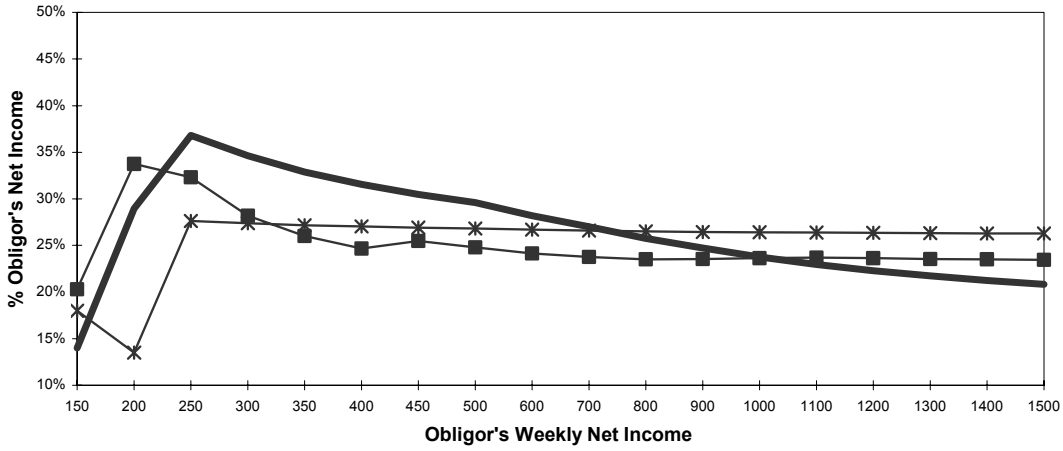
Support Due ($$ per week)				% of Obligor's Net Income			
Obligor's Net Weekly Income	Michigan	Hybrid Approach (Mass)	Melson Formula (Delaware)	Obligor's Net Weekly Income	Michigan	Hybrid Approach (Mass)	Melson Formula (Delaware)
150	21	30	27	150	14%	20%	18%
200	61	67	27	200	31%	34%	14%
250	103	87	77	250	41%	35%	31%
300	122	106	127	300	41%	35%	42%
350	139	125	144	350	40%	36%	41%
400	152	144	157	400	38%	36%	39%
450	166	175	170	450	37%	39%	38%
500	178	195	183	500	36%	39%	37%
600	202	244	209	600	34%	41%	35%
700	224	293	235	700	32%	42%	34%
800	247	343	261	800	31%	43%	33%
900	268	392	287	900	30%	44%	32%
1000	290	443	313	1000	29%	44%	31%
1100	312	492	339	1100	28%	45%	31%
1200	332	539	365	1200	28%	45%	30%
1300	353	586	391	1300	27%	45%	30%
1400	372	633	417	1400	27%	45%	30%
1500	389	680	443	1500	26%	45%	30%



CHILD SUPPORT FORMULAS - TWO CHILDREN
Obligee's Income = 50% of Obligor's Income

Support Due ($$ per week)				% of Obligor's Net Income			
Obligor's Net Weekly Income	Michigan	Hybrid Approach (Mass)	Melson Formula (Delaware)	Obligor's Net Weekly Income	Michigan	Hybrid Approach (Mass)	Melson Formula (Delaware)
150	21	30	27	150	14%	20%	18%
200	61	67	27	200	31%	34%	14%
250	100	87	77	250	40%	35%	31%
300	113	106	98	300	38%	35%	33%
350	125	125	111	350	36%	36%	32%
400	137	144	124	400	34%	36%	31%
450	148	174	137	450	33%	39%	31%
500	160	184	150	500	32%	37%	30%
600	182	211	176	600	30%	35%	29%
700	204	240	202	700	29%	34%	29%
800	225	269	228	800	28%	34%	29%
900	245	301	254	900	27%	33%	28%
1000	263	333	280	1000	26%	33%	28%
1100	280	365	306	1100	25%	33%	28%
1200	296	395	332	1200	25%	33%	28%
1300	311	425	358	1300	24%	33%	28%
1400	326	456	384	1400	23%	33%	27%
1500	341	486	410	1500	23%	32%	27%

Exhibit III-13
Child Support Formulas - Two Children
Obligee's Income = Obligor's Income



CHILD SUPPORT FORMULAS - TWO CHILDREN
Obligee's Income = Obligor's Income

Support Due ($$ perweek)				% of Obligor's Net Income			
Obligor's Net Weekly Income	Michigan	Hybrid Approach (Mass)	Melson Formula (Delaware)	Obligor's Net Weekly Income	Michigan	Hybrid Approach (Mass)	Melson Formula (Delaware)
150	21	30	27	150	14%	20%	18%
200	58	67	27	200	29%	34%	14%
250	92	81	69	250	37%	32%	28%
300	104	85	82	300	35%	28%	27%
350	115	91	95	350	33%	26%	27%
400	126	99	108	400	32%	25%	27%
450	137	115	121	450	30%	25%	27%
500	148	124	134	500	30%	25%	27%
600	169	145	160	600	28%	24%	27%
700	189	166	186	700	27%	24%	27%
800	206	188	212	800	26%	24%	27%
900	222	212	238	900	25%	24%	26%
1000	237	236	264	1000	24%	24%	26%
1100	252	261	290	1100	23%	24%	26%
1200	267	284	316	1200	22%	24%	26%
1300	282	306	342	1300	22%	24%	26%
1400	297	329	368	1400	21%	23%	26%
1500	312	352	394	1500	21%	23%	26%